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# IN THE CLAIMS

Please amend the claims as follows. The following listing of claims replaces all prior versions.

1-5.. (canceled).

6. (currently amended) A compound of the general formula (I)



wherein

X is C or CH~~an m-valent unit~~ and

B are identical or different and denote K-R, wherein

K is a bond or is  $A^1-(A^2-A^3)_k-sp$ , wherein

$A^1$  is  $(CH_2)_tY(CH_2)_u$ , wherein

Y is  $>C=O$ ,  $>NH$ ,  $-O-$ ,  $-S-$  or a bond,

t is an integer from 0 to 6 and

u is an integer from 0 to 6,

$(A^2-A^3)$  can be any  $A^2$  and any  $A^3$  in any combination,

$A^2$  is  $-NHCO-$  or  $-CONH-$ ,

$A^3$  is  $(CH_2)_r$ ,  $O(CH_2)_r$ , or  $S(CH_2)_r$ , wherein

r = 1,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen, sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose, Gal $\alpha$ 1-3Gal, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, Neu5Ac $\alpha$ 2-6GalNAc, SiaLe<sup>A</sup>, SiaLe<sup>X</sup>, HSO<sub>3</sub>Le<sup>A</sup>, HSO<sub>3</sub>Le<sup>X</sup>, Gal $\alpha$ 1-3Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3Gal $\beta$ 1-4Glc, Neu5Ac $\alpha$ 2-6Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc, N-acetyl-lactosamine or polylactosamine, sialic acid benzyl glycoside, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc $\beta$ 1-3Gal $\beta$ 1-4Glc, GalNAc $\alpha$ , GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>(Sia)Le<sup>X</sup>, HSO<sub>3</sub>(Sia)Le<sup>A</sup>, Le<sup>Y</sup>, GlcNAc $\beta$ 1-6(GlcNAc $\beta$ 1-3)Gal $\beta$ 1-

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4Glc, GalNAc $\beta$ 1-4(Neu5Aco2-3)Gal $\beta$ 1-4Glc, mannose-6-phosphate, GalNAc $\beta$ 1-4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Gal $\alpha$ 1-4Gal $\beta$ 1-4Glc, or Gal $\alpha$ 1-4Gal $\beta$ 1-4GlcNAc; and

m is at least 2,

with the proviso that

- (1) in the compound at least three R are not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment X(K)<sub>m</sub> is less than 20,000.

7-8. (canceled).

9. (previously presented) A compound of the general formula (I)



wherein

X is CH<sub>4-m</sub> and

B are identical or different and denote K-R, wherein

K is a bond or is A<sup>1</sup>-(A<sup>2</sup>-A<sup>3</sup>)<sub>k</sub>-sp, wherein

A<sup>1</sup> is CH<sub>2</sub>, wherein

Y is >C=O, >NH, -O-, -S- or a bond,

t is an integer from 0 to 6 and

u is an integer from 0 to 6,

(A<sup>2</sup>-A<sup>3</sup>) can be any A<sup>2</sup> and any A<sup>3</sup> in any combination,

A<sup>2</sup> is NHCO,

A<sup>3</sup> is CH<sub>2</sub>, wherein

r = 1,

sp is (CH<sub>2</sub>)<sub>3</sub>CONHCH<sub>2</sub>CONHC<sub>6</sub>H<sub>4</sub>-4-CH<sub>2</sub>O-, and

k is 8, and

R is Neu5Aco2-6Gal $\beta$ 1-4GlcNAc; and

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$m$  is an integer from 2 to 4,

with the proviso that

- (1) in the compound at least one R is not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and  $m$  are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment  $X(K)_m$  is less than 20,000.

10. (currently amended) An aggregate of the general formula (II):



wherein  $X(B)_m$  may be identical or different and denote a compound of the general formula (I),



wherein

X is C or CH~~an  $m$ -valent unit~~ and

B are identical or different and denote K-R, wherein

K is a bond or is  $A^1-(A^2-A^3)_k-sp$ , wherein

$A^1$  is  $(CH_2)_tY(CH_2)_u$ , wherein

Y is  $>C=O$ ,  $>NH$ ,  $-O-$ ,  $-S-$  or a bond,

t is an integer from 0 to 6 and

u is an integer from 0 to 6,

$(A^2-A^3)$  can be any  $A^2$  and any  $A^3$  in any combination,

$A^2$  is  $-NHCO-$  or  $-CONH-$ ,

$A^3$  is  $(CH_2)_r$ ,  $O(CH_2)_r$  or  $S(CH_2)_r$ , wherein

$r = 1$ ,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen, sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose,

Gal $\alpha$ 1-3Gal, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, Neu5Ac $\alpha$ 2-6GalNAc,

SiaLe<sup>A</sup>, SiaLe<sup>X</sup>, HSO<sub>3</sub>Le<sup>A</sup>, HSO<sub>3</sub>Le<sup>X</sup>, Gal $\alpha$ 1-3Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3Gal $\beta$ 1-4Glc,

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Neu5Ac $\alpha$ 2-6Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc, N-acetyl-lactosamine or polylactosamine, sialic acid benzyl glycoside, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc $\beta$ 1-3Gal $\beta$ 1-4Glc, GalNAc $\alpha$ , GalNAc $\alpha$ 1-3(Fuca1-2)Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3(Fuca1-2)Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>(Sia)Le<sup>X</sup>, HSO<sub>3</sub>(Sia)Le<sup>A</sup>, Le<sup>Y</sup>, GlcNAc $\beta$ 1-6(GlcNAc $\beta$ 1-3)Gal $\beta$ 1-4Glc, GalNAc $\beta$ 1-4(Neu5Ac $\alpha$ 2-3)Gal $\beta$ 1-4Glc, mannose-6-phosphate, GalNAc $\beta$ 1-4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Gal $\alpha$ 1-4Gal $\beta$ 1-4Glc, or Gal $\alpha$ 1-4Gal $\beta$ 1-4GlcNAc; and

m is 3 or 4,

with the proviso that

- (1) in the compound at least ~~one R is~~ three R are not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment X(K)<sub>m</sub> is less than 20,000, and n is from 2 to 100,000,

and wherein X(B)<sub>m</sub> are non-covalently bonded.

11. (previously presented) An aggregate according to claim 10 having a leaf-like, linear, cyclic, polycyclic, polyhedral, spherical or dendritic structure.

12. (currently amended) An aggregate according to claim 10 of two or more different compounds comprising a compound of the general formula (I)



wherein

X is C or CH~~an m-valent unit~~ and

B are identical or different and denote K-R, wherein

K is a bond or is A<sup>1</sup>-(A<sup>2</sup>-A<sup>3</sup>)<sub>k</sub>-sp, wherein

A<sup>1</sup> is (CH<sub>2</sub>)<sub>t</sub>Y(CH<sub>2</sub>)<sub>u</sub>, wherein

Y is >C=O, >NH, -O-, -S- or a bond,

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t is an integer from 0 to 6 and  
 u is an integer from 0 to 6,  
 $(A^2-A^3)$  can be any  $A^2$  and any  $A^3$  in any combination,  
 $A^2$  is  $-NHCO-$  or  $-CONH-$ ,  
 $A^3$  is  $(CH_2)_r$ ,  $O(CH_2)_r$ , or  $S(CH_2)_r$ , wherein  
 $r = 1$ ,  
 sp is a divalent spacer or a bond, and  
 k is an integer from 5 to 100, and

R is hydrogen, sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose, Gal $\alpha$ 1-3Gal, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, Neu5Ac $\alpha$ 2-6GalNAc, SiaLe<sup>A</sup>, SiaLe<sup>X</sup>, HSO<sub>3</sub>Le<sup>A</sup>, HSO<sub>3</sub>Le<sup>X</sup>, Gal $\alpha$ 1-3Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3Gal $\beta$ 1-4Glc, Neu5Ac $\alpha$ 2-6Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc, N-acetyl-lactosamine or polylactosamine, sialic acid benzyl glycoside, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc $\beta$ 1-3Gal $\beta$ 1-4Glc, GalNAc $\alpha$ , GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>(Sia)Le<sup>X</sup>, HSO<sub>3</sub>(Sia)Le<sup>A</sup>, Le<sup>Y</sup>, GlcNAc $\beta$ 1-6(GlcNAc $\beta$ 1-3)Gal $\beta$ 1-4Glc, GalNAc $\beta$ 1-4(Neu5Ac $\alpha$ 2-3)Gal $\beta$ 1-4Glc, mannose-6-phosphate, GalNAc $\beta$ 1-4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Gal $\alpha$ 1-4Gal $\beta$ 1-4Glc, or Gal $\alpha$ 1-4Gal $\beta$ 1-4GlcNAc; and

m is 3 or 4,

with the proviso that

- (1) in the compound at least ~~one R is three R~~ three R are not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment X(K)<sub>m</sub> is less than 20,000.

13. (canceled).

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14. (previously presented) A method according to claim 27, further comprising adding a concentrated salt solution, changing the pH or the temperature, or adding organic solvents.

15. (currently amended) A method for changing the structure of an aggregate of the general formula (II)



wherein  $X(B)_m$  may be identical or different and denote a compound of the general formula (I),



wherein

X is C or CH~~an m-valent unit~~ and

B are identical or different and denote K-R, wherein

K is a bond or is  $A^1-(A^2-A^3)_k-sp$ , wherein

$A^1$  is  $(CH_2)_tY(CH_2)_u$ , wherein

Y is  $>C=O$ ,  $>NH$ ,  $-O-$ ,  $-S-$  or a bond,

t is an integer from 0 to 6 and

u is an integer from 0 to 6,

$(A^2-A^3)$  can be any  $A^2$  and any  $A^3$  in any combination,

$A^2$  is  $-NHCO-$  or  $-CONH-$ ,

$A^3$  is  $(CH_2)_r$ ,  $O(CH_2)_r$ , or  $S(CH_2)_r$ , wherein

r = 1,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen, sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose, Gal $\alpha$ 1-3Gal, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, Neu5Ac $\alpha$ 2-6GalNAc, SiaLe<sup>A</sup>, SiaLe<sup>X</sup>, HSO<sub>3</sub>Le<sup>A</sup>, HSO<sub>3</sub>Le<sup>X</sup>, Gal $\alpha$ 1-3Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3Gal $\beta$ 1-4Glc, Neu5Ac $\alpha$ 2-6Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc, N-acetyl-lactosamine or polylactosamine, sialic acid benzyl glycoside, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc $\beta$ 1-3Gal $\beta$ 1-4Glc, GalNAc $\alpha$ , GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>(Sia)Le<sup>X</sup>, HSO<sub>3</sub>(Sia)Le<sup>A</sup>, Le<sup>Y</sup>, GlcNAc $\beta$ 1-6(GlcNAc $\beta$ 1-3)Gal $\beta$ 1-4Glc, GalNAc $\beta$ 1-4(Neu5Ac $\alpha$ 2-3)Gal $\beta$ 1-4Glc, mannose-6-phosphate, GalNAc $\beta$ 1-

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4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Gal $\alpha$ 1-4Gal $\beta$ 1-4Glc, or Gal $\alpha$ 1-4Gal $\beta$ 1-4GlcNAc; and

m is 3 or 4,

with the proviso that

- (1) in the compound at least ~~one R is~~ three R are not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment X(K)<sub>m</sub> is less than 20,000, and  
 n is from 2 to 100,000,  
 and wherein X(B)<sub>m</sub> are non-covalently bonded,  
 further comprising adding a concentrated salt solution, changing the temperature or the pH and/or adding urea, trifluoroethanol or peptides.

16. (previously presented) A method according to claim 27 further comprising increasing the specific physiological activities of molecules by incorporating a radical R into a compound of the general formula (I).

17. (canceled).

18. (currently amended) A method of treating diseases arising from inflammation, viral and bacterial infections, influenza viruses, selectin-mediated inflammatory processes, tumour metastases, or in the neutralisation of antibodies in autoimmune disorders and transplants; said method comprising administering a compound of the general formula (I)



wherein

X is C or CH~~an m-valent unit~~ and

B are identical or different and denote K-R, wherein

K is a bond or is A<sup>1</sup>-(A<sup>2</sup>-A<sup>3</sup>)<sub>k</sub>-sp, wherein

A<sup>1</sup> is (CH<sub>2</sub>)<sub>t</sub>Y(CH<sub>2</sub>)<sub>u</sub>, wherein

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Y is  $>C=O$ ,  $>NH$ ,  $-O-$ ,  $-S-$  or a bond,  
 t is an integer from 0 to 6 and  
 u is an integer from 0 to 6,  
 $(A^2-A^3)$  can be any  $A^2$  and any  $A^3$  in any combination,  
 $A^2$  is  $-NHCO-$  or  $-CONH-$ ,  
 $A^3$  is  $(CH_2)_r$ ,  $O(CH_2)_r$ , or  $S(CH_2)_r$ , wherein  
 $r = 1$ ,  
 sp is a divalent spacer or a bond, and  
 k is an integer from 5 to 100, and

R is hydrogen, sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose, Gal $\alpha$ 1-3Gal, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, Neu5Ac $\alpha$ 2-6GalNAc, SiaLe<sup>A</sup>, SiaLe<sup>X</sup>, HSO<sub>3</sub>Le<sup>A</sup>, HSO<sub>3</sub>Le<sup>X</sup>, Gal $\alpha$ 1-3Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3Gal $\beta$ 1-4Glc, Neu5Ac $\alpha$ 2-6Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc, N-acetyl-lactosamine or polylactosamine, sialic acid benzyl glycoside, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc $\beta$ 1-3Gal $\beta$ 1-4Glc, GalNAc $\alpha$ , GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>(Sia)Le<sup>X</sup>, HSO<sub>3</sub>(Sia)Le<sup>A</sup>, Le<sup>Y</sup>, GlcNAc $\beta$ 1-6(GlcNAc $\beta$ 1-3)Gal $\beta$ 1-4Glc, GalNAc $\beta$ 1-4(Neu5Ac $\alpha$ 2-3)Gal $\beta$ 1-4Glc, mannose-6-phosphate, GalNAc $\beta$ 1-4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Gal $\alpha$ 1-4Gal $\beta$ 1-4Glc, or Gal $\alpha$ 1-4Gal $\beta$ 1-4GlcNAc; and

m is 3 or 4,

with the proviso that

- (1) in the compound at least ~~one R is~~ three R are not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment  $X(K)_m$  is less than 20,000; or administering into an aggregate of the general formula (II)



wherein



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$X(B)_m$  may be identical or different and denote a compound of the general formula (I), and  $n$  is from 2 to 100,000, and wherein  $X(B)_m$  are non-covalently bonded.

19. (canceled).

20. (previously presented) A method according to claim 18 further comprising preparing functionalized molecular surfaces.

21-22. (canceled).

23. (currently amended) A compound of the general formula (I),



wherein

$X$  is C or CH~~an  $m$ -valent unit~~ and

$B$  are identical or different and denote  $K-R$ , wherein

$K$  is a bond or is  $A^1-(A^2-A^3)_k-sp$ , wherein

$A^1$  is  $(CH_2)_tY(CH_2)_u$ , wherein

$Y$  is  $>C=O$ ,  $>NH$ ,  $-O-$ ,  $-S-$  or a bond,

$t$  is an integer from 0 to 6 and

$u$  is an integer from 0 to 6,

$(A^2-A^3)$  can be any  $A^2$  and any  $A^3$  in any combination,

$A^2$  is  $-NHCO-$  or  $-CONH-$ ,

$A^3$  is  $(CH_2)_r$ ,  $O(CH_2)_r$ , or  $S(CH_2)_r$ , wherein

$r = 1$ ,

$sp$  is a divalent spacer or a bond, and

$k$  is an integer from 5 to 100, and

$R$  is hydrogen, sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose,  $Gal\alpha 1-3Gal$ ,  $Gal\alpha 1-3(Fuc\alpha 1-2)Gal$ ,  $GalNAc\alpha 1-3(Fuc\alpha 1-2)Gal$ ,  $Neu5Ac\alpha 2-6GalNAc$ ,  $SiaLe^A$ ,  $SiaLe^X$ ,  $HSO_3Le^A$ ,  $HSO_3Le^X$ ,  $Gal\alpha 1-3Gal\beta 1-4GlcNAc$ ,  $Gal\alpha 1-3Gal\beta 1-4Glc$ ,

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Neu5Ac $\alpha$ 2-6Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc, N-acetyl-lactosamine or polylactosamine, sialic acid benzyl glycoside, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc $\beta$ 1-3Gal $\beta$ 1-4Glc, GalNAc $\alpha$ , GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>(Sia)Le<sup>X</sup>, HSO<sub>3</sub>(Sia)Le<sup>A</sup>, Le<sup>Y</sup>, GlcNAc $\beta$ 1-6(GlcNAc $\beta$ 1-3)Gal $\beta$ 1-4Glc, GalNAc $\beta$ 1-4(Neu5Ac $\alpha$ 2-3)Gal $\beta$ 1-4Glc, mannose-6-phosphate, GalNAc $\beta$ 1-4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Gal $\alpha$ 1-4Gal $\beta$ 1-4Glc, or Gal $\alpha$ 1-4Gal $\beta$ 1-4GlcNAc; and

m is 3 or 4,

with the proviso that

(1) in the compound at least three R are not hydrogen.

(1)(2) X, B and m are so selected that an intermolecular association of the K in liquid phase is possible, especially under aqueous conditions, by the formation of hydrogen bonds, with formation of aggregates, and

(2)(3) the molar mass of the fragment X(K)<sub>m</sub> is less than 20,000, especially less than 4000.

24–26. (canceled).

27. (currently amended) A method of preparing an aggregate comprising:  
 preparing a compound of the general formula (II)



wherein

X(B)<sub>m</sub> may be identical or different and denote a compound of the general formula (I),



wherein

X is C or CH<sub>n</sub> and m-valent unit and

B are identical or different and denote K–R, wherein

K is a bond or is A<sup>1</sup>–(A<sup>2</sup>–A<sup>3</sup>)<sub>k</sub>–sp, wherein

A<sup>1</sup> is (CH<sub>2</sub>)<sub>t</sub>Y(CH<sub>2</sub>)<sub>u</sub>, wherein

Y is >C=O, >NH, –O–, –S– or a bond,

t is an integer from 0 to 6 and

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u is an integer from 0 to 6,  
 $(A^2-A^3)$  can be any  $A^2$  and any  $A^3$  in any combination,  
 $A^2$  is  $-NHCO-$  or  $-CONH-$ ,  
 $A^3$  is  $(CH_2)_r$ ,  $O(CH_2)_r$ , or  $S(CH_2)_r$ , wherein  
 $r = 1$ ,  
 sp is a divalent spacer or a bond, and  
 k is an integer from 5 to 100, and

R is hydrogen, sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose, Gal $\alpha$ 1-3Gal, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, Neu5Ac $\alpha$ 2-6GalNAc, SiaLe<sup>A</sup>, SiaLe<sup>X</sup>, HSO<sub>3</sub>Le<sup>A</sup>, HSO<sub>3</sub>Le<sup>X</sup>, Gal $\alpha$ 1-3Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3Gal $\beta$ 1-4Glc, Neu5Ac $\alpha$ 2-6Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc, N-acetyl-lactosamine or polylactosamine, sialic acid benzyl glycoside, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc $\beta$ 1-3Gal $\beta$ 1-4Glc, GalNAc $\alpha$ , GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>(Sia)Le<sup>X</sup>, HSO<sub>3</sub>(Sia)Le<sup>A</sup>, Le<sup>Y</sup>, GlcNAc $\beta$ 1-6(GlcNAc $\beta$ 1-3)Gal $\beta$ 1-4Glc, GalNAc $\beta$ 1-4(Neu5Ac $\alpha$ 2-3)Gal $\beta$ 1-4Glc, mannose-6-phosphate, GalNAc $\beta$ 1-4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Gal $\alpha$ 1-4Gal $\beta$ 1-4Glc, or Gal $\alpha$ 1-4Gal $\beta$ 1-4GlcNAc; and

m is 3 or 4,

with the proviso that

- (1) in the compound at least three R are not ~~are not~~ R is not hydrogen,
  - (2) there are at least two K that are not a bond, and
  - (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
  - (4) the molar mass of the fragment  $X(K)_m$  is less than 20,000, and
- n is from 2 to 100,000,  
 and wherein  $X(B)_m$  are non-covalently bonded.

28. (currently amended) A method of preparing a therapeutic drug comprising: preparing the compound of the general formula (I)

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wherein

X is C or CH~~an m-valent unit~~ and

B are identical or different and denote K-R, wherein

K is a bond or is  $A^1-(A^2-A^3)_k-sp$ , wherein

$A^1$  is  $(CH_2)_t Y(CH_2)_u$ , wherein

Y is  $>C=O$ ,  $>NH$ ,  $-O-$ ,  $-S-$  or a bond,

t is an integer from 0 to 6 and

u is an integer from 0 to 6,

$(A^2-A^3)$  can be any  $A^2$  and any  $A^3$  in any combination,

$A^2$  is  $-NHCO-$  or  $-CONH-$ ,

$A^3$  is  $(CH_2)_r$ ,  $O(CH_2)_r$ , or  $S(CH_2)_r$ , wherein

r = 1,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen, sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose, Gal $\alpha$ 1-3Gal, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal, Neu5Ac $\alpha$ 2-6GalNAc, SiaLe<sup>A</sup>, SiaLe<sup>X</sup>, HSO<sub>3</sub>Le<sup>A</sup>, HSO<sub>3</sub>Le<sup>X</sup>, Gal $\alpha$ 1-3Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3Gal $\beta$ 1-4Glc, Neu5Ac $\alpha$ 2-6Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc, N-acetyl-lactosamine or polylactosamine, sialic acid benzyl glycoside, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal, HSO<sub>3</sub>GlcA $\beta$ 1-3Gal $\beta$ 1-4GlcNAc $\beta$ 1-3Gal $\beta$ 1-4Glc, GalNAc $\alpha$ , GalNAc $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, Gal $\alpha$ 1-3(Fuc $\alpha$ 1-2)Gal $\beta$ 1-4GlcNAc, HSO<sub>3</sub>(Sia)Le<sup>X</sup>, HSO<sub>3</sub>(Sia)Le<sup>A</sup>, Le<sup>Y</sup>, GlcNAc $\beta$ 1-6(GlcNAc $\beta$ 1-3)Gal $\beta$ 1-4Glc, GalNAc $\beta$ 1-4(Neu5Ac $\alpha$ 2-3)Gal $\beta$ 1-4Glc, mannose-6-phosphate, GalNAc $\beta$ 1-4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Gal $\alpha$ 1-4Gal $\beta$ 1-4Glc, or Gal $\alpha$ 1-4Gal $\beta$ 1-4GlcNAc; and

m is 3 or 4,

with the proviso that

- (1) in the compound at least three R are~~one R is~~ not hydrogen,
- (2) there are at least two K that are not a bond, and

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- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment  $X(K)_m$  is less than 20,000; or  
preparing the compound of the general formula (II):



wherein

$X(B)_m$  may be identical or different and denote a compound of the general formula (I), and

n is from 2 to 100,000,

and wherein  $X(B)_m$  are non-covalently bonded; and

a pharmaceutically acceptable carrier.

29. (canceled).